

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Aggreko

Manufacturing Extension Partnership of Louisiana

Aggreko's National Repair Center: Achieving Excellence with Lean Manufacturing

Client Profile:

Aggreko, an international company, manufactures rental power generators, temperature control equipment and compressed air systems. Aggreko's National Repair Center, located in New Iberia, Louisiana, is one of 47 company locations in North America. The National Repair Center does the major repair and reconditioning of power generators and air compressors. There are a total of 125 people employed at the New Iberia facility, with 25 employees specifically working in the National Repair Center division.

Situation:

Aggreko's National Repair Manager, Mitch Boudreaux, said his division was considering going to multiple shifts with multiple employees to increase productivity but wanted to avoid doing so because it would result in increased costs. Mitch and two other Aggreko National Repair Center employees attended a free lean manufacturing overview held by the Manufacturing Extension Partnership of Louisiana (MEPoL), a NIST MEP network affiliate, in March 2003 at Tulane's campus in Harahan, Louisiana. It peaked their interest in lean manufacturing as a potential solution for their company, and within months, MEPoL project directors were visiting Mitch and his staff at their facility.

Solution:

MEPoL's Director of Manufacturing Productivity, Shannon Nunez, worked with Aggreko's National Repair Center to conduct a Discovery Assessment of their situation at the time. Utilizing the assessment results, he developed recommendations for the company that included training and implementation of lean manufacturing, with facilitation and hands-on involvement from MEPoL. In February 2004, the company held a two-day lean manufacturing workshop that included MEPoL's Principles of Lean Manufacturing, and 5S System (sort, set-in-order, shine, standardize, sustain) workshops. Nunez worked with the company to do value stream mapping and develop lean performance metrics to track their progress on lean improvements. Employee-led teams were highly involved in the implementation of improvements, from standardizing the shop layout to developing visual process controls. Some of the changes Aggreko's National Repair Center has undergone include: (1) changing process areas in their shop for more efficient operation and improved capacity; (2) selling or discarding red tag items that were taking up space but not useful to their operations; 3) purchasing and installing a new, 15-ton crane to increase capacity; 4) installing a drive on wash rack to increase productivity; 5) Implementing visual process controls that include multi-color tags for generators that need servicing, painted buckets for specific parts, and Kanban supplies; 6) purchasing and installing racks for parts too large for containers and developing an organized system for storage; and 7) developing a new layout for their yard as part of their 5S system and visual process controls; 7) new Paint Shop; and 8) new Electrical Shop.

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Results:

- * Improved turnaround time by 23 percent, from an annual average of 57 days in 2003, to 44 days in 2004, and down to 27 days in April 2005.
- * Decreased potential loss of sales revenue due to equipment downtime by 41 percent in 2004.
- * Reduced work in process by 41 percent, from \$631,000 in 2003 to \$370,000 in 2004.
- * Retained 25 jobs.
- * Hired new employee.
- * Charged out over 12,000 hours in 2004 and still improved every performance metric.
- * Increased productive hours from 78 percent to 81 percent in 2004.
- * Cross training between departments.
- * Improved employee morale and motivation.

Testimonial:

"I think Shannon and company have done a very good job organizing and facilitating our lean efforts. The employees realized that they are truly part of a team and that their input truly makes a difference."
Mitch Boudreaux, Manager